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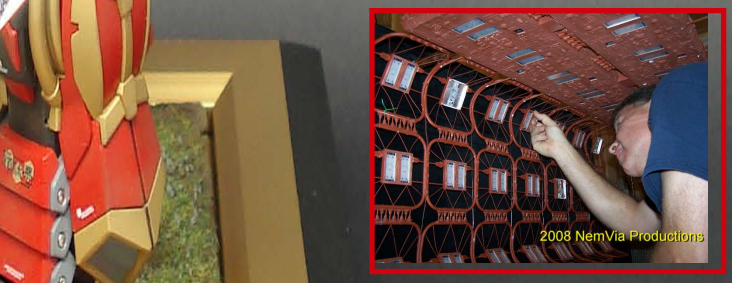
PSYCHO STYRENE

The Journal of SCI-FI, Fantasy, & Horror Modelling

Moebius Revisited

Orca Scratchbuild Part 2



Star Trek Dry Dock

Building Stop Motion Puppets

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Data Burst

By Geek Bot

Welcome to Issue 7 of Psycho Styrene model magazine, as it's a year since we launched the first issue I thought it would be a nice idea to go back and talk to Frank Winspur of Moebius Models to see how is company has moved on over the last year.

We have some great stuff in here for you this month so I won't delay you any longer than to just thank every one that has both bought this mag and those that have contributed to it over the last year.

Well that's my rave over for this issue we have some good articles in here this issue so enjoy the mag and we will be back to our regular transmission in 60 days☺

Front Cover By Scot Talylor
Rear Cover By Richard Svennson

This Issue

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The Orca – Part 2

By Frank Cuomo

Welcome back to the second part of the building of the orca here we will look at detailing and painting the model, so with out any further delay on with the process.

DETAILING

Now I was able to continue with the rest of the build. Although the roof and back wall of the cabin would remain removable I thought it would be easier to completely finish the inside of the cabin now. The only reference I had was in the movie so I spent a lot of time capturing frames on my computer that I could refer to. I wanted to recreate the infamous scene when they where drinking and singing at the table and Quint tells the tale of the USS Indianapolis. I was able to pickup some dishes and silverware from a dollhouse supply. I then repainted them to make them more realistic. Most of the other items I had to scratch build out of styrene. I made a hot plate, tool box, table, first aid kit, clock, gauges and the CB radio. The cushions for

the seating area where sculpted out of Super Sculpey and then painted. I used Tamiya acrylic paints to paint the interior and all of its accessories. I then

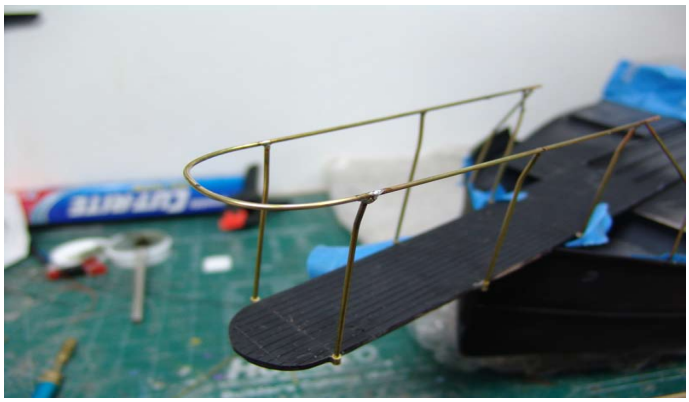
give it a coat of Testor's Dullcoat before moving on to weathering. To give things a lived in look I made a wash from black oil paint thinned down quite a bit. The mixture should be 10 parts thinner to 1 part paint. I brush this over the wood and let it seep into the cracks but before it dries I wipe up the excess with a dry towel. When it does dry I seal it with a coat of Dullcoat. To punch up the details I dry brush some highlights and give it a final coat of Dullcoat. It may seam excessive to apply so many coats of sealer between the steps but it allows you to add without affecting the paint beneath it. It will also allow you to wipe off a mistake without affecting all the work you have already completed.

Detailing the flying bridge was next which meant building a few gauges and instruments. To make the gauges I downloaded pictures of actual gauges off the internet from boating supply sites. I then printed them out at the appropriate size. Again I went to my brass tubing stash and found tubing sizes that matched the gauges. I then drilled holes in the control panel to slide the tubing through leaving only 1/16" of tubing sticking out the top. Inside the tube I slid a piece of styrene tubing which gave me a place to glue the paper gauge. To simulate the glass I mixed up some 5 minute epoxy and heated it up with my heat gun. When you do this it thins the epoxy and eliminates a lot of the air bubbles, it only takes a few seconds to work so don't linger too long. This is also helpful when you need to brush epoxy onto

something whereas it would normally be too thick.

The mast was a piece of 3/8" brass tubing. I ran wire through it for the light that sits at the top and soldered a small wire connector to the bottom so that it could be removed from the boat. I scratch built the winch that is mounted on the mast from odds and ends I had lying in my parts box. The railing around the pulpit, the ladder and the chair where all

made from brass tubing that I soldered with a small torch. I really like using brass for details and in this case it really added to the look of the build. It takes some patience when soldering but if you take your



time it's worth it. On the actual boat there is rope wrapped around the top of the ladder and I wanted to add the detail to the miniature. I had purchased

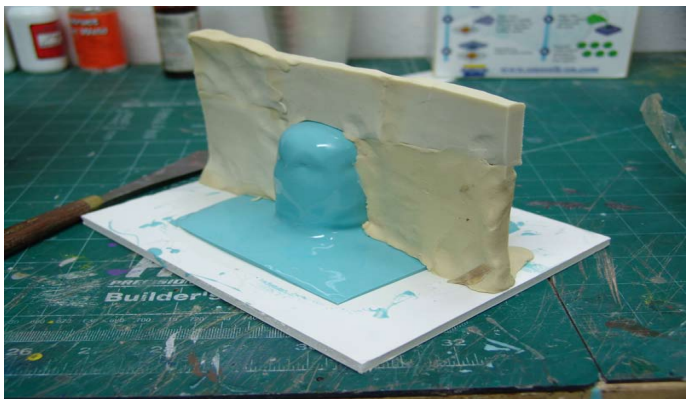
rigging rope which is used when building old model ships. This by itself was too thin for what I needed so I took three strands of the thread and clamped them into my vise. I then put the other end of the threads in the chuck of my cordless drill. Slowly I let the drill twist the threads together to form a miniature rope. If I took the thread out of the vise now it would just unravel so I took white glue and thinned it with water and then painted it over the rope. When the glue began to dry and was still sticky I took the rope out of the vise and drill and I started wrapping it around the brass tubing and because the rope was still sticky it stuck to the brass without any additional adhesive.

One of the famous details onboard the Orca has to be the barrels that sit on the foredeck. To make one I started with a block of balsa wood and rounded it to shape on a lathe. After adding a few details and sealing the balsa it was ready to go but I still needed more than one . I decided to make a mold of the

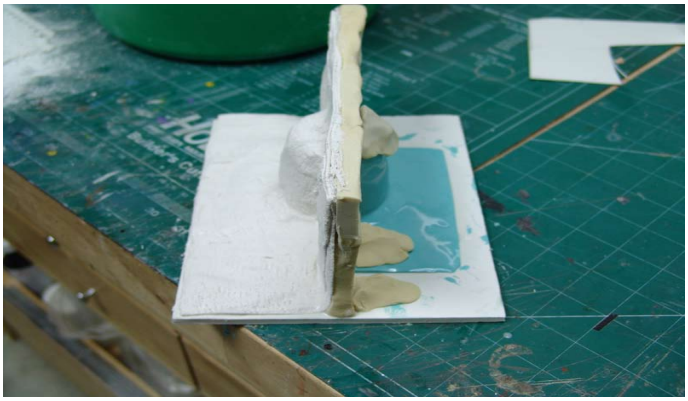
wooden barrel and cast more in resin. I really like Smooth-On products and have been using them for years so that's what I made the mold and cast from (www.smooth-on.com). Typically I use their Mold Max silicone but they were advertising a new mold silicone that was very simple to use and I thought I would give it a try. Oddly enough it is called ooMoo – don't ask me? I only use the stuff. To start I mounted the balsa wood barrel to a 5" x 5" piece of

foam board and then sprayed the barrel with Krylon Crystal Clear to seal everything for the silicone. I then mixed the silicone per the instructions and painted the first coat on. It is best to do this in thin coats to avoid air bubbles which could ruin the mold. After building the silicone up to about ¼" thick I let it sit to dry. If you stopped here and removed

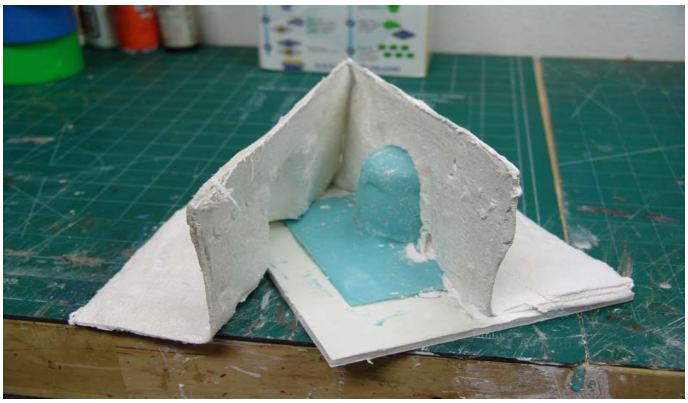
the silicone you would have a perfectly good mold but the silicone by itself is not firm enough to keep its shape. That is why we need to make a "mother-mold". To do this, I built a dividing wall down the center of the barrel with plasticene clay about 2" out from the barrel all the way around. Then using



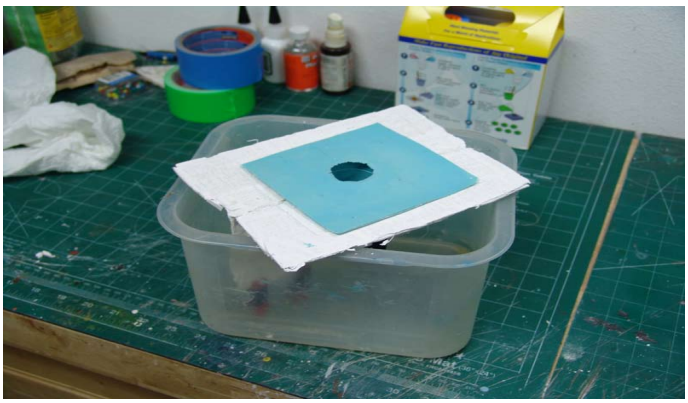
plaster bandages I built up one side of the wall. I put about three layers of bandages and then let the plaster dry. When the plaster dries you can remove



the modeling clay but before you can build the other side you need to make sure the plaster doesn't stick to itself or you'll wind up with a mold that won't open! To avoid this I brush on a good coat of Vaseline anywhere that the plaster may touch. It is best to be generous because you can just wipe it off after you open the mold. With the release agent in place I was able to build up the other half of the mother mold. When dry I went around the edge of the plaster mold with my X-Acto knife and split it open. I then cut a slit down the side of the silicone



and removed it from the barrel. And now it's time to make some barrels! I put the mold back together and clamped it shut. Again, I used a Smooth-On



product, it's their Smooth Cast 300 resin. I mixed up the two parts and then poured some into the mold

Smooth-Cast™ 300
WHITE LIQUID PLASTIC
Mix ratio: 1 A : 1 B by VOLUME
THIS IS PART-A
Smooth-Cast™
WHITE LIQUID PLASTIC
Mix ratio: 1 A : 1 B by VOLUME
THIS IS PART-B

slowly to avoid trapping any air. Before adding all of the resin I stuck a brush into the mold and brushed some of the resin around the sides. Then I poured the rest in to the top. There's not much working time so you need to have everything prepared before you mix the two parts together. After only a few minutes the resin is dry and you can pull it from the mold. If you joined the seam carefully you will have virtually no flashing to remove.

PAINTING

I started by coating the whole thing with automotive primer. Typically I like to use Tamiya Super Fine Primer but I didn't think it would give the coverage needed over the balsa. To paint the hull I used Testors Flat Black spray paint. I let that dry

overnight and then masked off the areas around the red stripe. For the red color I used Floquil Caboose Red. I really like Floquil paints because they give a really nice flat finish. The hardest part is getting the

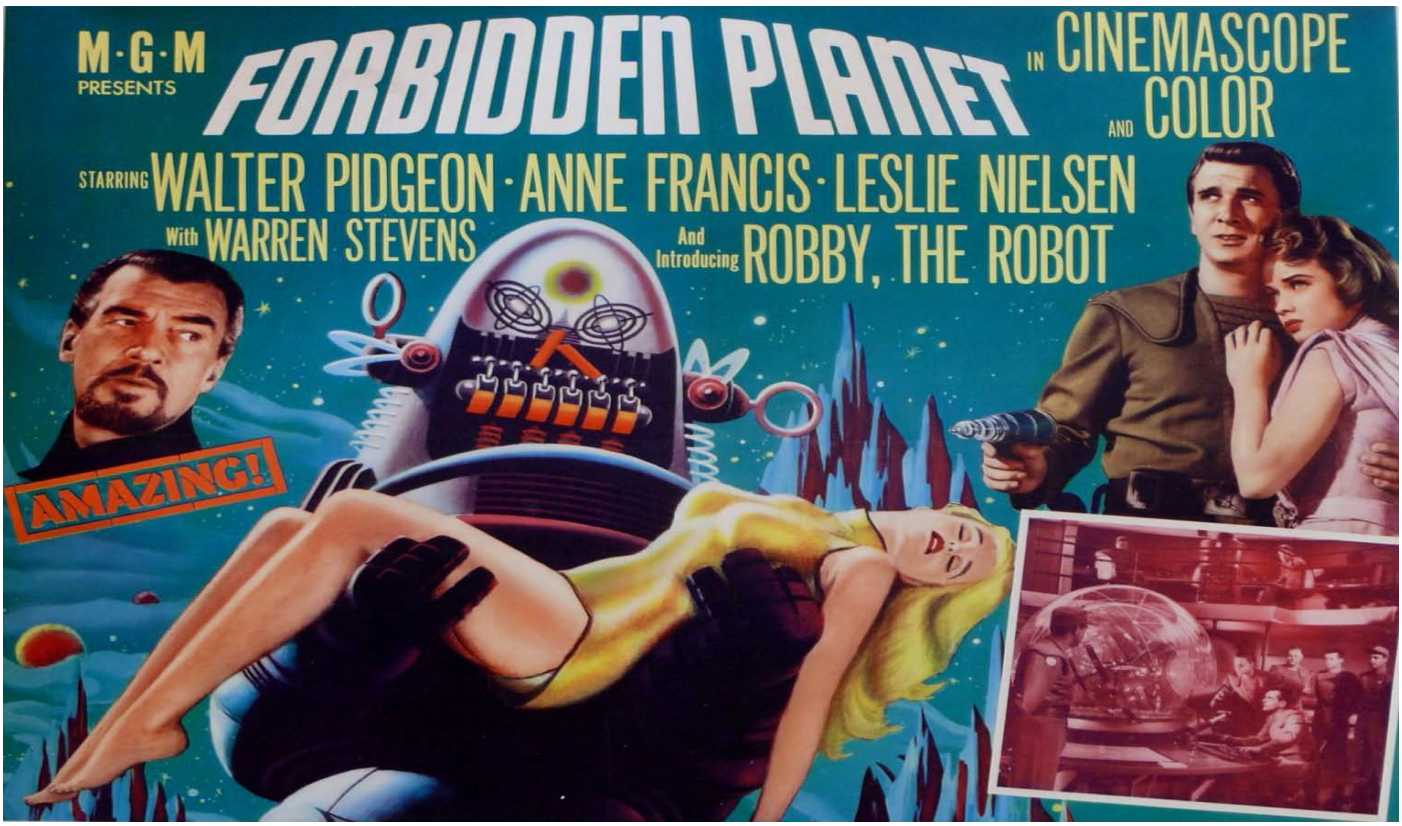
correct color for the rest of the boat. It appears to be a sick green/grey color which changes with the lighting during the movie so it's really difficult to get right. I finally settled on a mix of Tamiya JN Grey and Sky Grey. This base color is a little darker than it will be when I 'm done weathering. After I have the rest of the details added I will move on to final weathering with washes and chalks.

This is really a fun build and I'm learning to appreciate what goes into building a boat from scratch. I still have a lot of detailing to do and the more I watch the film the more I see what I still have to build. And the longer this build goes on the more I'm talking myself into sculpting a shark to accompany the Orca, but that's something for another article. If you want to continue following the build or have any questions check out my blog at: www.themodelgarage.blogspot.com

Happy Fishing!

Reviews

Polar Lights Robby The Robot.



By Tobin Franks

From the 1956 sci fi classic Forbidden Planet comes one of the greatest big screen robots of all time; Robby. While I consider myself more of a garage kit figure builder, I do like to go back to my styrene roots every once in a while. And when I do Im always reminded of how challenging styrene can be. I built this kit pretty much right out of the box with not modifications other than the nameplate. This kit has over 50 parts, white, clear & chrome. I built up Robby's upper body/ arms, legs/feet & head as 3 separate sub assemblies. The body nests over the legs & the seam between the head & body looks natural, so these sub assemblies made sense to me so I could easily sand the seams on the legs & body and paint the details in the head.

I started with the legs & body. I use good old Testors "airplane" glue for larger parts that require a strong bond & apply it to the entire seam. I use enough glue so that I get a small bead to bulge out & cover the seam. Then I clamped the parts to set up over night. The next day I came back to remove the seams. I start out by scraping the bead of glue off of the seam with a sharp, curved pottery tool. I am careful not to remove too much material. I just want to get the bulk of it off. Then I reduce the seam further with a few grades of sanding sponges. I get the seams to where they look & feel smooth, then its off to the kitchen sink for a warm soapy bath to remove the dust & skin oils. I allow the assemblies to dry over night and then I hit them with a light coat of grey sandable primer. The 1st coat of primer reveals all

the imperfections, so its back to sanding. Some gaps may appear also, I fill these with Bondo Glazing & Spot Putty. I find the best way is to just wipe it

across the gap with my finger. Its cheap, dries fast & sands smooth. For the tight spots like in between Robby's leg segments I use a mini file to knock the seam down the fold a piece of sandpaper in half to smooth it out. Then its back to the sink for another wash, dry over night, primer, sand & repeat the process until the seams are smooth.

Now its time to paint. I glued the legs to the body & secured floral wire to the inside of the body assembly for a handle & to have a handy hanger for drying. I loaded up my airbrush & experimented with a few shades of grey, some browns & metallics. Nothing quite looked right to me. I finally settled on a mix of grey & brown that approximated Robby's color but a little lighter. I sprayed a slightly darker mix into the recessed areas & that was it, airbrush 101. I like to keep it simple. I then detailed Robby's star drive & movement device with craft acrylics. I sealed the legs/body assembly with Krylon Matte & hung it up to dry. The next step was to build up the head assembly leaving off the clear coil tubes in Robby's brain. I did however add the clear transducer fins & scanner fins & the chrome parts. The clear transducer fins are in 2 parts with a seam right down the middle. So I glued them together then filed & sanded them smooth. The head assembly is them, primered & sprayed the same grey/brown mix I used on the body & sealed. Then it was on to detail painting. I used craft acrylics to paint the details in Robby's brain. I chose muted colors to give Robby a more retro look. Then I glued the clear coil tubes in place. With the head assembly completely built & painted I sealed it then dusted it with black pastel. I worked the pastel into all the nooks & crannies in the head assembly & Robby's chest plate, then wiped it away with a damp cloth. A final light coat of Krylon to seal to finish it off. All except for Robby's clear dome I should say! All I did here was line the edge of the dome with

a black Sharpie marker & placed it onto the head assembly without gluing it. Robby's clear voice tubes were painted on the backside with blue ink mixed with a little clear acrylic gel. Once dry it was glued in place with just a tiny bit of glue on the contact pins. CA glue will fog the clear parts, so Testors glue was used for this.

Now its on to the base. I sawed a channel into the base to hold the nameplate. The Forbidden Planet nameplate I used can be purchased from Fritz, the Headless Hearseman. http://www.vampir.headlesshearseman.com/plates.html

These plates are inexpensive, high quality & Fritz's service is excellent. I added some Aves Apoxie Sculpt to the channel, wrapped the plate in foil to keep it from sticking, then pressed the plate into the Aves. I removed the plate & sculpted the Aves to match the base it was then primed & base-coated a neutral tan, drybrushed with a light tan, then sealed. I used a few different shades of brown & grey craft acrylics to paint each rock & sealed again. I then gave it a glaze of blue ink mixed with clear acrylic gel, allowed it to set up a little & wiped it away with a damp cloth & (yes you guessed it) sealed again.

I seal a lot. Each time you seal, your kit takes on a little more depth. I then sponged some off-white & mustard acrylics mixed with gel onto parts of the base to lighten it up. And sealed again!

The way I paint nameplates is pretty straightforward. I like to use white primer so the colors really pop. For this plate I chose blue along the bottom of the raised letters to pick up the color of Robby's voice tubes. I think this helps tie the entire presentation together. The tops of the letters where painted bright yellow. Then the blue & yellow were blended together with a little clear acrylic gel. This is done by hand with a damp brush & feathering motion. Once this is dry I seal it well with Krylon. Then black craft acrylic is painted over the entire plate, thinned with a little water so there are no brush strokes. This is then allowed to dry completely. Then I go back with a Q-tip dampened with rubbing alcohol & the black paint is scrubbed off of the raised letters. Ill go thru several Q-tips on this step, switching to a clean one whenever the black paint gets too smeary. Once the black is cleaned away from the letters I carefully painted the plate's raised border blue & sealed it. The plate is glued to the base with a drop of CA and were done!

Thanks to Polar Lights for making this cool kit available. The kit is being reissued early 2009 so keep your eyes open for it! Happy Modeling!

Interviews

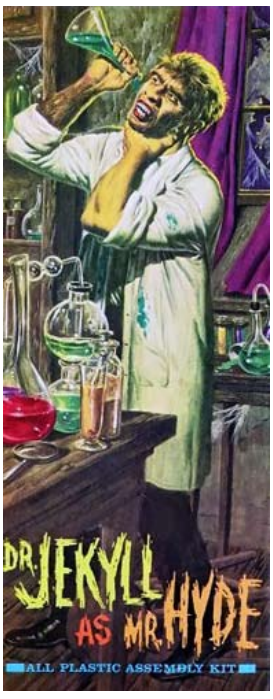
Moebius Revisited

By Darren Llewellyn

Hello again Frank, so how has your second year of business been for you?

Not too bad. We put a lot of new product out, and it all seems to be welcomed by the fans. Just hope the economy holds on!

All of your kits seemed to have been incredibly well received on the forums, were you shocked at how well they were taken by the public?



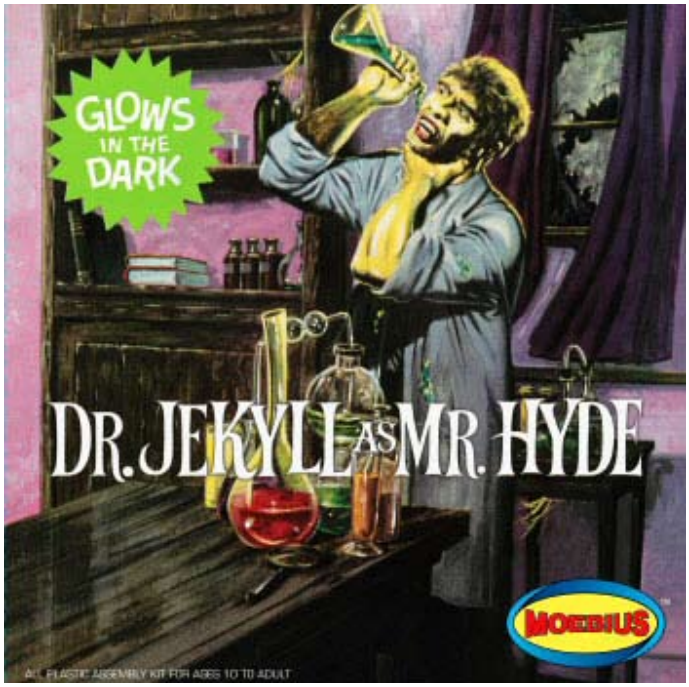
Not really. We did a bit of research before we put anything out, and have tried to stick to the fans wants. They are a very vocal group, so it's been easy to see the direction they have wanted us to go.

Have you been surprised at the way your products have taken off?

A little. We expected it to take some time for things to really get the widest audience, but it really has taken off as you said! The kit fans are great about that. They have spoken with their wallets, and we really appreciate it!

Do you feel this goes to show how many modelers there are out there laying in wait for good quality kits?

I think so. Being a modeler myself, I find myself buying repo kits occasionally, but something new always gets my attention first. A lot of guys don't collect, so once is enough for them, they just want new good kits.



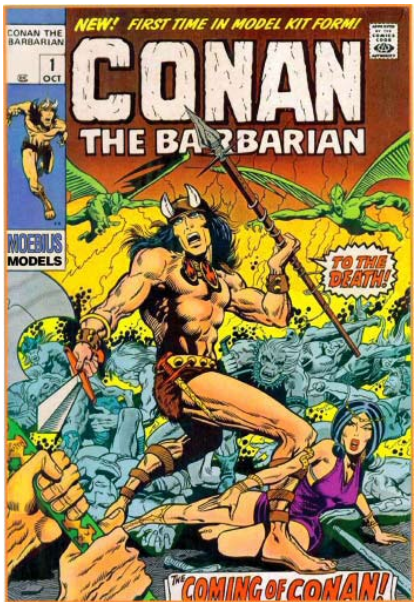
So with the retro kit market taking off and the amount of new kits being produced by you do the term retro kits, being used to refer to your company bother you?

Not really. The only thing that bothers me is when people refer to all of our kits as rereleased Aurora. I have seen on ebay a few times where the Seaview is described as an Aurora reproduction. Same with Chariot and Space Pod. I think it can be deceiving to the customer as they don't truly understand what they are getting.

You seem to have gone into overdrive with the number of kits released and announced, what has been the biggest hurdle for you?

The schedule. We had all of this spread out over the year in 2008, but the factory had delays, and it caused kits to get grouped together. Very tough on the fan. In November, we had 8 kits come in within 6 weeks of one another. Very tough for anyone to pick all of them up, so it hurt our sales. I know in the long run it will be fine, but I just hate to have the fans thinking this was our plan.

Looking at the kits you have done and the ones announced, you seem to have gone for a fairly wide range of subjects, from sci-fi to fantasy and horror, is this a deliberate choice or just the way things have fallen?



We have tried to reach a wide audience. We even have a car in the works for this year!

Have you seen a move by some of the bricks and mortar shops to stocking your kits or is your main selling arena still the internet?

We have more of the brick and mortar guys stocking now. They had been doing a lot of special ordering it seemed, but from our distributor orders, it appears more are keeping an actual stock of our kits.

I have to say that I was shocked that my local model shop stocked the Jekyll and voyager kits. I have to say having built 2 or 3 of last years releases, the quality on the kits is very high especially in comparison to some larger UK companies, have you had trouble getting this standard out of the manufactures?

No, we have a very good factory in China working with us. They have a great deal of experience in doing styrene kits. We do go through a number of changes with test shots, but I have to credit Dave Metzner with that. He really gets in and holds the quality.

It seems that the success of smaller startups like your company has kick started some of the big boys into releasing retro style kits, does this come as a surprise to you?

Well, I guess it was bound to happen. They see us selling a good number of kits, and they want to jump in on it. I don't mind

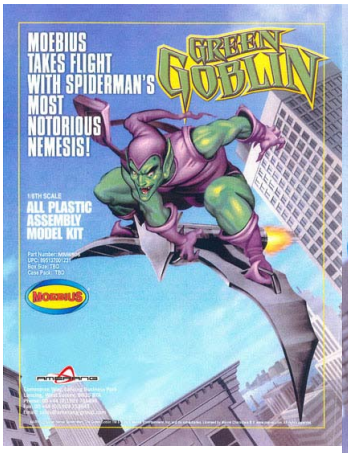
competition, as long as it's fair competition.

Would you say that this is a direct reflection on your success?
I have been told that it's coincidence, but I'm a little too old to believe in that. Considering that we had gone to other manufacturers initially hoping to rerelease some of the kits they had tooling for, and we were laughed off, just makes me think they realize it could be done.

You have a good few mainstream kits on your books now, with the likes of iron man, spider-man and green goblin, to name a few, what has been the biggest hurdle in getting these to market?
It seems that here in the States, all of the mass market stores have discontinued kits, regardless of the subject. I think that the Marvel kits would do well for any of the larger stores, but they have no interest. It's sad if there really was no interest, but our orders through hobby sales have been great on these. At some point I hope they relent and put kits back in. They are missing sales!

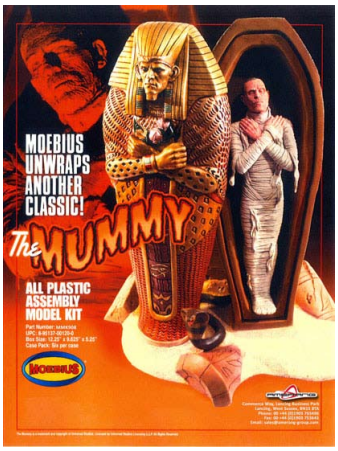
Excluding the movie Iron Man for a second, are the marvel kits completely new or are they reissues?
All completely new. I know some advertising by resellers say they are reissue, they are not the old Aurora kits. Besides Aurora never having a Green Goblin kit, ours is styled to Marvel's current look for him. I hope everyone will enjoy them!

Have you any plans to release any more super hero kits?
We have no time left under the Marvel license, but I would love to do something with DC. Maybe at some point it could happen, but we're not moving in that direction right now.



Given a chance to do any super hero kit, what character would you like to do?
I'd really love to redo the old Wonder Woman kit, or the Penguin. I really wish I would have been able to get the Spider-man produced that I wanted, but we couldn't get approval to do him our way.

Have Moebius models any plans to expand beyond the sci-fi fantasy arena?
Yes, we are looking into other areas, our first automobile kit will be out this year. Not a traditional car, but something along the lines of an Ed Roth type vehicle.



I have to say that with the monster kits that you have slated for release this year you seem to be cleaning up with the "Classic Monsters" are we likely to see a Dracula and Wolf man in the future?
Maybe a Dracula. 2009 ends our license with Universal, but we may see about a renewal to get some other product out. Creature will be very close to the end of our time, if we can sneak it in!

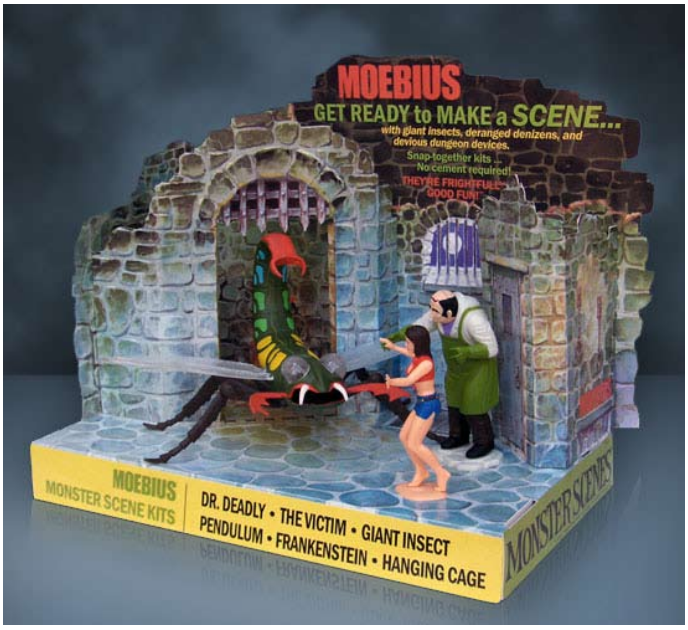
What has been the biggest challenge with getting these underway?
With Universal, everything has been very smooth. We had some delays on Big Frankie due to product safety testing , and that was really the only holdup.

The Mummy looks like it will be a huge model with the sarcophagus; did you consider doing it in smaller scale than the other monster kits?
We did ,but we have decided that 1/8 will be a constant scale for all of our monster kits. This way they'll be able to be displayed together. The Mummy is really a huge kit as you say, wait til you see it!

Believe me I can't. Everyone on the modeling forums seems to be after the Vampirella kit, is there any chance of seeing this in styrene?
I don't think so. This is one where licensing is very tough. I'd love to do one or two, but it would be a struggle to get it done it appears.

Are there any plans to issue more kits in the monster scenes line?
There is a possibility. Initial sales have been slower than expected, but we attribute that to the slow economy. No one is really spending money right now. We're going to look at two more for this year, but it really depends on how the current lines sales

continue.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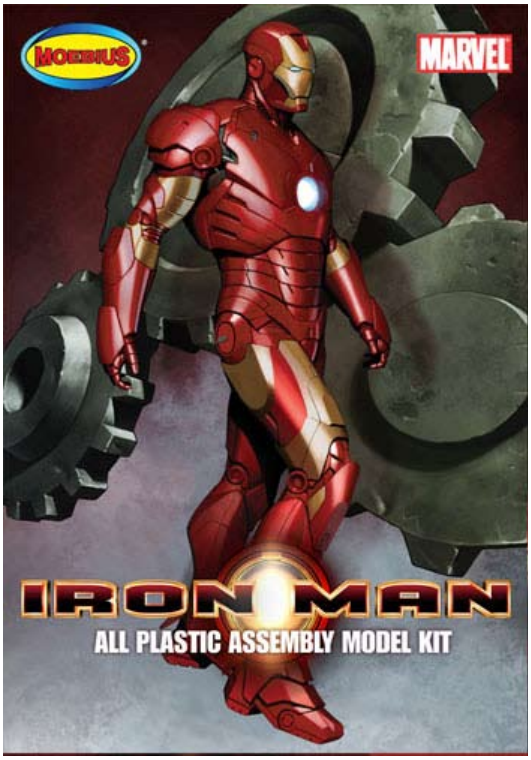
MONSTER SCENES

I have been hearing a lot of call on some of the forums for more classic characters to be done as kits, quiet recently someone was talking about "Johnny Quest", Could you see your company doing something along the lines of these classic cartoon characters?
That would be tough. Honestly, I don't see enough sales. Possibly resin kits would be the way to do them. I love Johnny Quest, and it would be nice to do something with him!



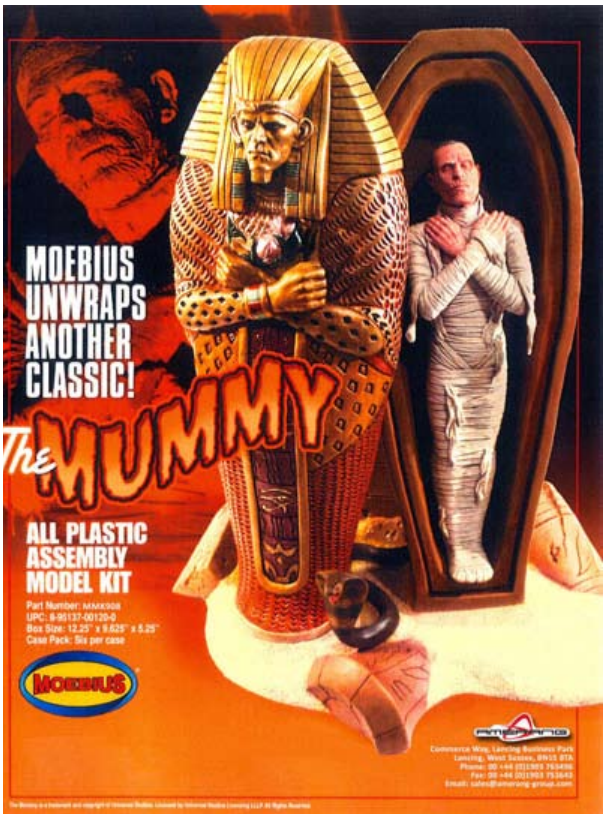
Is there any chance of seeing a kit from the heavy metal comics, or a silver surfer in that style?
No Surfer for sure, but Heavy Metal would have some interesting things. May be worth a look again soon!

Where do you see Moebius models going from here?
We'd like to branch off into some other lines of items. Kits have been good to us, and we'd never abandon them, but we do need to expand into other areas to keep growing.

So with the kits released last year and all those on the list for this year, what have you got on the drawing board for 2009-2010?
With all the "coincidences" with other companies right now, we're keeping everything we can close to the vest. I hate to see something else we announced being taken from us!

What do you see as the future of Moebius going, and where would you like to be in the next year?
Next year I'd like to see the economy better for everyone so they can buy all they want and not have to pick and choose. I see more kits along the same lines, but with added items that will be aimed at the more experienced modeler. We do have some plans for kits and pieces that you would have most likely considered aftermarket in the past, being incorporated into some kits. Should be fun to see how the fans react!

Ok thanks for talking to us again, and I hope your success continues.
Thanks again, always glad to chat about kits!
We have a sneak peak at the mummy kits for you too


MOEBIUS
UNWRAPS
ANOTHER
CLASSIC!
The MUMMY
ALL PLASTIC
ASSEMBLY
MODEL KIT
Part Number: MMX908
UPC: 8-98137-00120-9
Box Size: 12.25" x 9.625" x 5.25"
Case Pack: Six per case
MOEBIUS

Prototype
Subject to change

Reviews

SHIN MUSHA GUNDAM

By Scott Taylor

Introduction

Written by Yoshiyuki Tomino, Mobile Suit Gundam is a Japanese Anime series about a young boy named Amuro Rey who mistakenly becomes the pilot of the Earth Forces new prototype mechanised weapon, the Gundam, essentially an eighteen and a half meter tall mechanised robot.

Since its initial broadcast in 1979, Mobile Suit Gundam has spawned many more series as well as a ton of merchandise such as video games, toys, and most importantly, model kits. Released by Bandai, Gundam model kits can come in a variety of different scales and grades. Most common are the 1/144 High Grade and 1/100 Master Grade scales.

For this build I will be working with a recent Master Grade kit, the 'Shin Musha Gundam' taken directly from the 'Gundam Musou' Video Games (known as Dynasty Warriors Gundam in Western countries on Playstation and Xbox). The Shin Musha is one of the main antagonist Mobile Suits from the games 'Original Story Mode'.

Build Inspiration

The Shin Musha Gundam would have to be one of the most interesting designs from any of the Mecha within the Gundam Universe. Not only does the design mix the charm of Mecha with that of the Samurai, but the whole 'steam pipe' look makes it one of the most interesting subjects I have built to date. When I saw that the kit was being

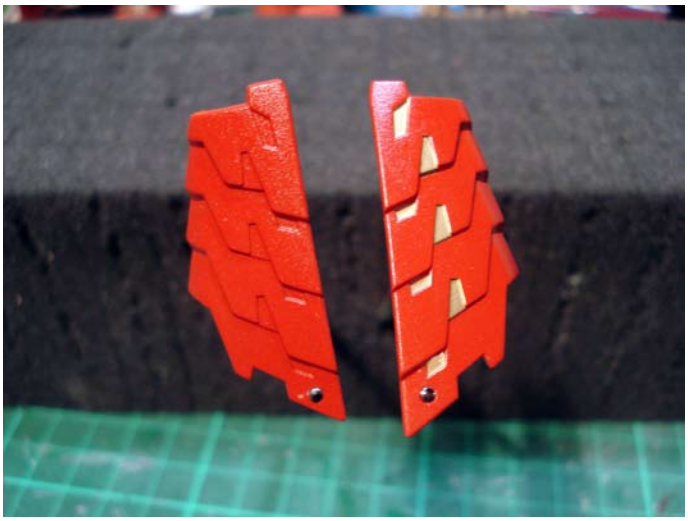
released, I didn't waste time getting a hold of it from Hobbysearch Japan (http://www.1999.co.jp/eng), an online store that I purchase a lot of Gundam kits from as they are quite cheaper than Brick-n-Mortar stores over here in Australia.

After a few recent projects that were quite time consuming and intense, I decided to try and keep this build as close to Out of the Box (OOB) with some small cosmetic changes (no serious modifications or scratch building) and at the same time keeping the colour scheme similar to the original but changing it slightly. Overall, I wanted a nice clean look as if the Mobile Suit had just left the factory.

Building the Model Kit

I assembled this kit as per the instructions, but as I went, I prepared each piece thoroughly by removing the sprue nubs and flash marks. This is a little different to how I generally build, as I like to assemble the kit first, and then clean the pieces up as I prepare each for painting. This turned out to take a lot longer than I planned as there are well over 330 pieces for this kit.

Once it was all assembled, I broke the kit down into sections so it would be easier to manage and keep track of all the parts. I began with the 'skirt' section (aka the waist), and added the pinheads from dressmaker pins to the corners of the skirt armour.



To mount the pinheads, I first measured and marked exactly where I wanted to mount it. Then I took my trusty pinvise, an appropriate drill bit (which was sized against the thickness of the actual pin 'shaft') and drilled a hole. I then took a larger drill bit (sized against the actual pinhead) and drilled out a recessed area at the top of the first hole to allow the pinhead to be flush with the piece once it was mounted. I test fitted the pinhead and adjusted the hole as necessary.

Still on the waist armour, I primed the pieces with Tamiya Grey Primer, and air brushed on Tamiya Flat Red once the primer had dried. I then top coated the red with Tamiya Clear and then painstakingly

masked off each of the small, recessed areas in between the armour pieces. So much for a nice and easy OOB build! Once masked, these areas were air brushed with Mr Metal Brass. I used this colour as a substitute for gold in this case, as it has a flatter look to it instead of standard gold.

The feet and legs were next up. Pins were added to several places using the same method as before. The internal frame was air brushed with Model Masters Aluminium (a metallic lacquer) and top coated with a light misting of Tamiya Clear Red. Doing this makes the Aluminium take on a slightly tarnished, rose colour which suits the overall colour scheme as it is predominately red. I repeated the process for all of the other parts, adding pins to the armour as would fit without over crowding the kit with too many.

Aluminium thrusters are a common aftermarket replacement in the world of Gunpla (the Japanese term for Gundam plastic models), so I replaced

the standard ones that came with the kit with some nice, shiny ones purchased from Hong Kong based web-store Akohobby (http://www.akocreation.com). The inner thrusters bells were air brushed with Tamiya Clear Red (to match the red theme of the build) and IC socket pins were added to the central shafts for additional detailing. These Integrated Circuit sockets (round pin type) can be purchased from electronic parts suppliers (as I got mine from), and it's just a matter of cutting away the outer plastic of the socket to reveal the pin. Then all you need to do is cut the pin to size and fix in place. The thrusters were attached to the original mounts by way of a small section of brass rod mounted in a small hole and then all fixed together with a drop or two of CA Glue.

For the head sensor window and eyes, I used another aftermarket product purchased from Akohobby called an 'Aurora Sticker'. This product is an adhesive backed film that reflects different coloured light back depending on the angle the viewer is looking at. The type I used is green in colour, but can change to shades or green, blue, red, purple or pink depending on the angle viewed and the light it is in. The eye pieces were purchased already cut to the correct size and shape, but I needed to cut the sensor pieces out of a larger sheet and attach them. I really like this product as it replaced the need to me to paint the sections how I generally do (masking, Black base, Chrome layer, Clear Yellow layer and Clear Green top layer) and it gives a more dynamic look.

There are a number of panel lines over this kit and they had a wash applied to bring them out. The panel lines on the white pieces were washed in a diluted black enamel mix and the red pieces were given a gold enamel wash to match the colour scheme (and it made them stand out more than black would have done).

Bandai generally supply stickers or dry transfer decals with their Master Grade line on kits and this one as no exception. Using the stickers was out of the question and the dry transfers were a maybe,

but I managed to locate some custom made water slides from online store Samuel Decal (http://www.samueldecal.com), who specialise in water slide decals for Mecha kits. These were applied all over the kit and most of them represent 'warning' messages on the moving parts of the Shin Musha. A few of the decals broke as they were a bit delicate / I was too rough with them, but the majority went

on fine. Since then, Bandai have released an official water slide decal set as they do a few months after the release of any of their Master Grade line of kits. A simple picture frame was used as the base, with a section of it masked off and painted with Mr Metal Brass to match the colour scheme of the kit. I tried Clear Red at first (it was silver) but I couldn't get an even coating so I ended up using the brass. A piece of balsa the size of the inner frame was covered in air drying clay and air brushed with brown, black and greens. Once that had all dried, it was sprinkled with green and brown flock and some grey ballast and fixed into place with a spray adhesive. The kit was firmly fixed to the base with some small lengths of brass rod and CA Glue after the action pose was finalised. I also weathered the lower sections of the kit accordingly with the Tamiya Weathering Set to give a 'dusty' look, as if it was new but had been out

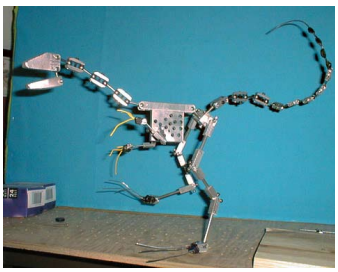
in the open field for a little bit.
The paints used for this build were as follows (acrylic unless otherwise specified) -
Tamiya Nato Black.
Tamiya Flat Red.
Tamiya Flat White.
Tamiya Brown.
Tamiya Clear Red.
Tamiya Clear.
Mr Hobby Dark Sea Gray.
Mr Metal Colour Brass (lacquer).
Model Master Aluminium (lacquer).
Overall, I am quite happy with how this build has ended up. It is a very detailed kit (even for current Master Grade standards), and I had a lot of fun building this one. If there is one kit I would recommend to anyone, then this one would be it.

Techniques

Stop-Motion Puppets! The Build-up Method.

By Richard Svensson

Since the advent of user-friendly frame-grabbing software there's been a boom in home-made stop-motion animation, just check YouTube if you have your doubts. Most of them are very simple projects using Lego characters or other ready-made puppets. Although making your very own puppet is much more rewarding if a bit more complicated. You can go from building your puppets out of the simplest crudest household stuff to casting them using state-of-the-art professional materials. Both approaches are absolutely fine; it all depends on the story you're telling. Most pro puppets are cast in silicone or foam rubber and have an armature, the puppet "skeleton", consisting of very sophisticated ball-and-socket metal joints. But there is another time-tested way of creating your puppets –the "build-up" method. This is how the puppets for the original "King Kong" were created. Basically, this technique means that you start off with the armature and add flexible materials on top of that, until you have a moveable sculpture. This method is always the more cost-effective one and you can get results that are just as good (and sometimes better) as a cast puppet.



This is a general

overview of how I make my puppets. I have on occasion bought a couple of professionally built ball-and-socket jointed metal armatures but as a general rule such items are way too highly priced for an amateur. Instead I usually build all of my armatures using braided aluminium wire. Two-three wires are

braided together by sticking them in a hand-held drill and rotating them wile holding the other ends of the wires with a pair of pliers. This will result in very tightly braided wires that will hold up better under the stress of constant bending and that will

wiggle and spring back less than a lonely wire. The parts of the armature that will act as “bones”,

the stiff parts in the puppet body, are covered with Friendly Plastic. This is a thermo plastic that gets pliable when heated. I soften the pieces of plastic with a heat gun and mold it around the wire with my fingers, leaving the “joints” free and bendable. I attach more and more pieces of braided wire until the armature is finished. Other animators prefer to use plumber’s epoxy between the joints.

After building your armature it’s time to put some flesh on it. I usually start with making the head as a separate sculpture and cast it as such. This is just to get the look of the head just right, since it’s a pretty important part of your character. My favourite brand of clay is Chavant. It’s oil-based, which means it won’t dry up and it has the perfect consistency for creating

great detailing. You'll have to figure out what kind of a mold will be appropriate for your puppet head. The idea is to create a loose, but not too thin, latex skin that can be placed over your head armature which will be padded with foam rubber. In short, you make the sculpture, do a mold of it in durable gypsum material (such as Ultracal) and pour some latex into the finished mold. Take care to make the latex a little thinner in the mouth and eyebrow areas,

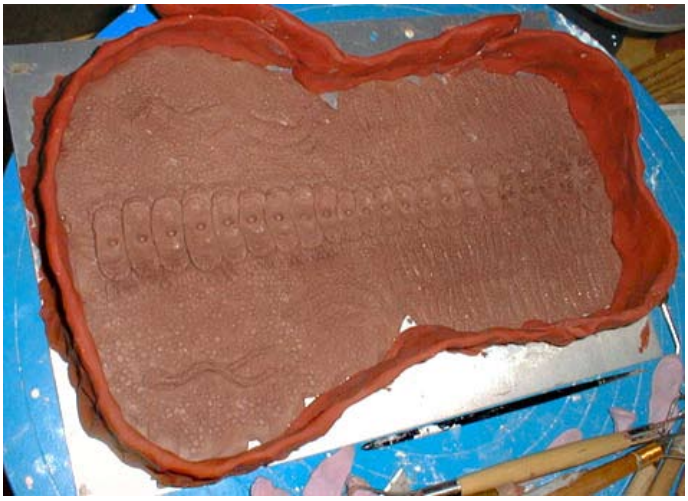
if you are going to have movement there. I make my puppet eyes out of plastic pearls or balls from cheap necklaces bought at garage sales. Usually I just paint them (carefully) and coat them with clear gloss finish. To make eye sockets I press down the finished eyes halfway into a piece of clay then apply a few layers of mold-making latex over the exposed part of the eye as well as a small area of surrounding clay. The last layer of latex is reinforced with some cotton. When the latex has set you have a flexible eye socket that will hold the eye, but allows you to move the eye around by pushing it with a pencil eraser. Put the socket in place on the inside of your latex head skin before attaching it to the armature. Pop the eyes into place after painting your puppet.

Sometimes I attach latex gums and teeth directly to the latex head skin. You can also make teeth and gums out of Sculpey or Friendly Plastic and stick them onto the jaw of the armature. The placement of the muscles of your puppet will almost always make or break your puppet character. Again, go to nature for the best reference. Check out pictures of muscles without skin and study how they overlap each other. Nowadays you can even find images of dinosaur muscles. Take time to do a sketch of how the muscles are supposed to sit on your puppet. It may be that your puppet character is highly stylized,

like Wallace & Gromit but it still needs a base of soft muscles over its armature. Cut pieces of

upholstery foam, like an old foam mattress, to form your muscles. If you can, use two different densities, softer for around the joints where there will be a lot of movement, and harder for areas where you will be grabbing hold of the puppet a lot while animating, like the upper part of the back and the back of the shoulders. The muscles are glued on with contact cement and put in shape as they are bent and glued in place. The smooth outer surface of the foam mattress will of course be facing outward. In this way the entire armature is covered. Try bending the joints every once in a while and check that the foam doesn't hinder the armature in its movements.

When I make skin for an entire puppet, let's take



a dinosaur as example, I roughly measure the proportions of the built-up body. This means that I do an approximate measure of the length of the body, the stretch of area from the top of the back to the bottom of the belly, underside of tail and underside of neck. Together these measurements make a sort of pattern that I simply draw an outline of on a piece

of Chavant clay rolled out flat. This outline should look like a skinned dino- a pelt. Several shapes are then sculpted in this clay surface; larger folds, wrinkles and scales –I've even made some veins on occasion. When you have this pattern to go from it's really easy to see where you should put detailing. Of course, additional detailing occur spontaneously when you stretch and shape the skin while attaching it to the foam muscles but I like to add some stuff already when the skin is produced. It makes for great

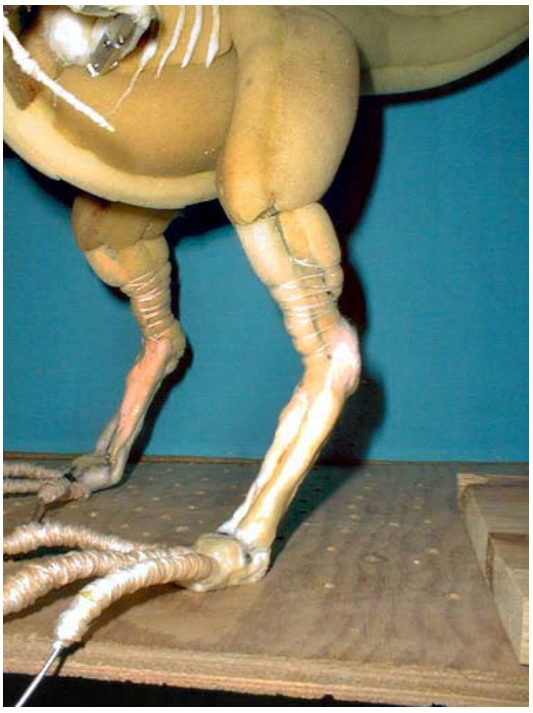
control.

Then you make a plaster cast, preferably in Ultracal since it's a really durable material. Tear off a piece of foam rubber and use it to sponge some latex into the cast. Try to find latex used for slush-molding fake noses and such appliances. My impression is that it's

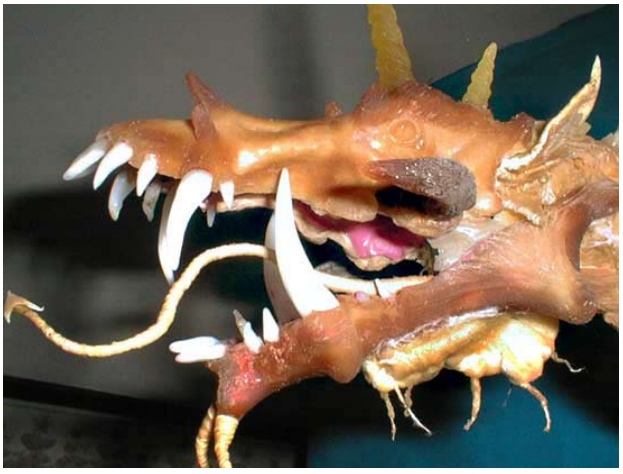
softer than mold-making latex. Let the latex dry in the mold, powder it liberally with talcum and remove it carefully by peeling it slowly from the mold. Use a new sponge and dab the inside of the skin piece with latex. Then carefully lay it onto your built-up

puppet, slowly pressing the skin against the foam muscles until the liquid latex has soaked slightly into the foam. Now leave the skin on and let it slowly stick to the foam. It won't take that long. Just sit with the puppet and press on the skin here and there until it has grabbed hold of the puppet in all spots. You will now get some wrinkles around the body that will hopefully look natural, but if you've already sculpted some wrinkles and folds in the skin before casting it, these will help putting the skin in place in such areas as around the legs, tail, and neck. This

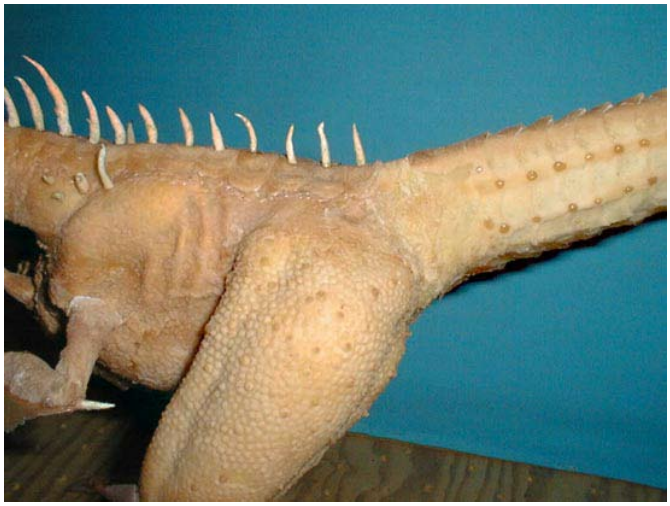
larger skin mold is also usable for creating smaller skin pieces for the legs, for patching, etc. You can't get away with a build-up and not patching the skin, but it does help working with larger pieces of skin to begin with. After applying smaller and



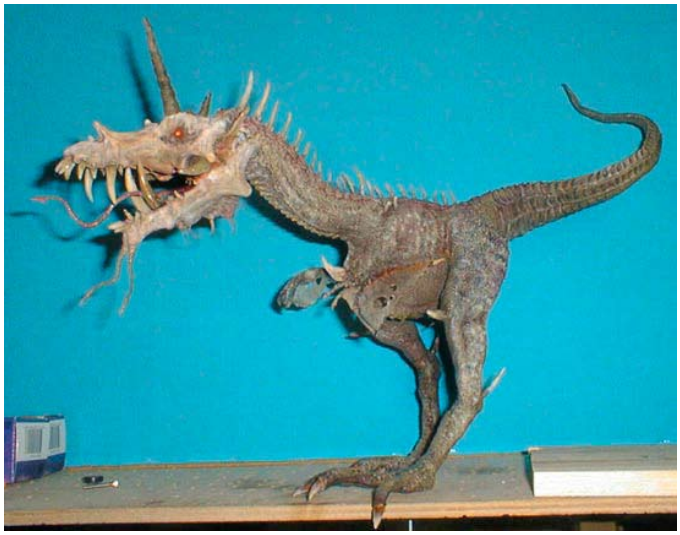
overlapping latex pieces, hide the seams with some drops of latex. As I said, I prefer to sponge the latex into the molds. This creates thinner, more



uneven edges that are easier to blend over each other. Sometimes I've also made texture stamps for



producing scaly skin. This means I've sculpted only a tiny part of the skin, made a thin, flexible mold of it with mold-making latex and simply used this flat latex mold as a texture stamp, pressing it into larger clay sculpts to create skin texture easier and faster. I've also made texture stamps from toys, real reptile skin and other surfaces. I usually paint my puppets



with PAX-paint (a mixture of the prosthetic glue ProsAide and acrylic paint). This gives you a very strong painted surface, although a tad shiny. You can choose to drybrush colour after colour over your puppet or airbrush it using acrylic paints. I use a type of paint used by taxidermists that comes with a base that really grabs hold of the airbrushed shades.

That's about it. As I said, this is a general overview of how I do puppets. I hope I've managed to whet your appetite and make you interested enough to have a go at stop-motion yourself. This old art needs

every recruit it can get! If you're wondering about specific details, or need any further encouragement just stop by my web page loneanimator.com and drop me a mail.

You can check out some more of Richards work here
His Blog

And some of his movies here

Coming in Issue 8

Round 2 Models - An interview with an up and coming model company that has some great products on it's books

Mark Nehmzow - with the second part of his dry dock model

Richard Svensson – Shows us some cool ways to composite puppets with live action for all those want to be Spielbergs out there

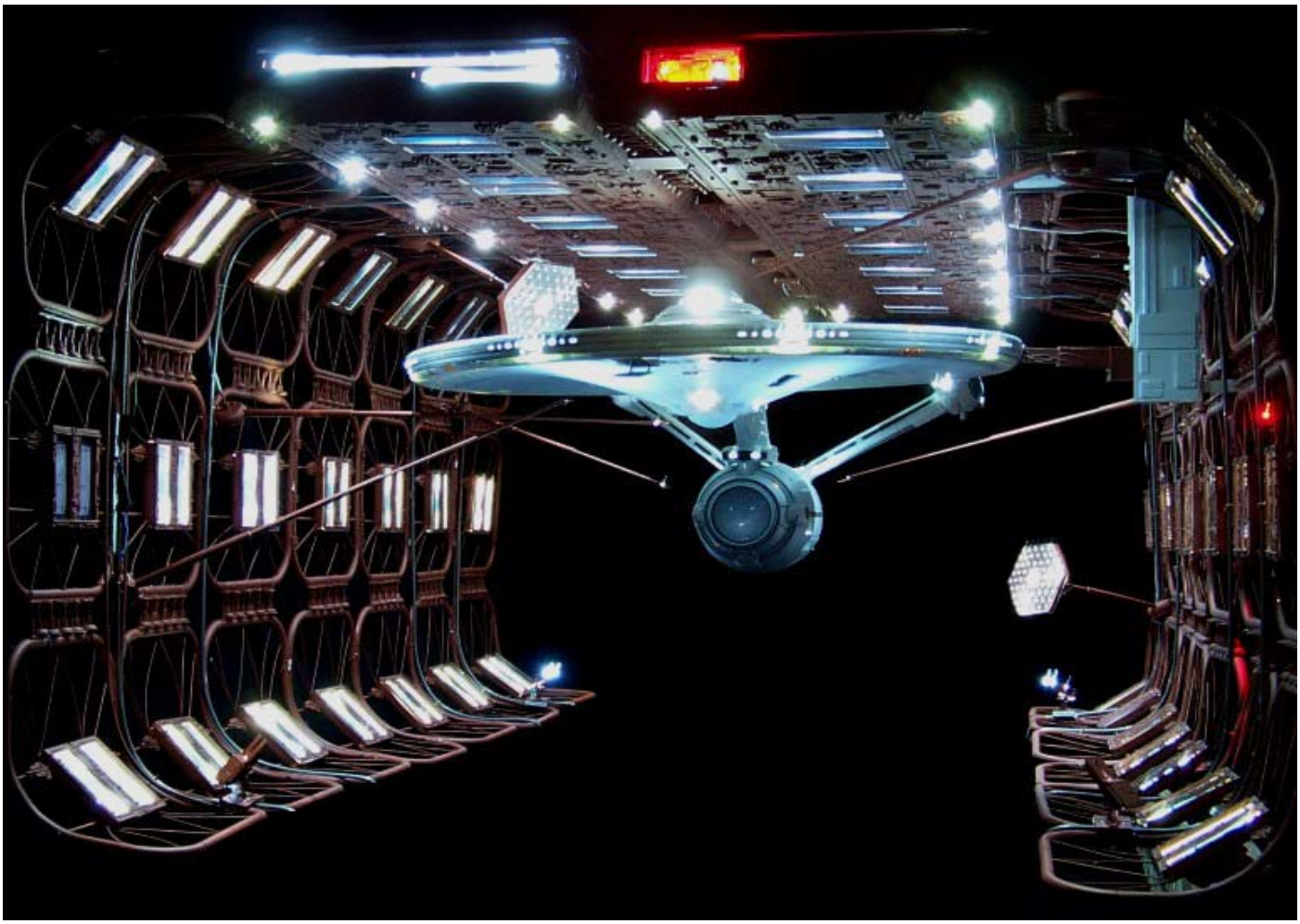
Scratch Build – Jay Barnes talks us through his laser tank from the cult series Space:1999

Lasse Henning – Gives us a look at his prototype Republic Blockade Runner

ScratchBuild

Scratch Building the Star Trek: The Motion Picture Dry-dock

By Mark Nehmzow

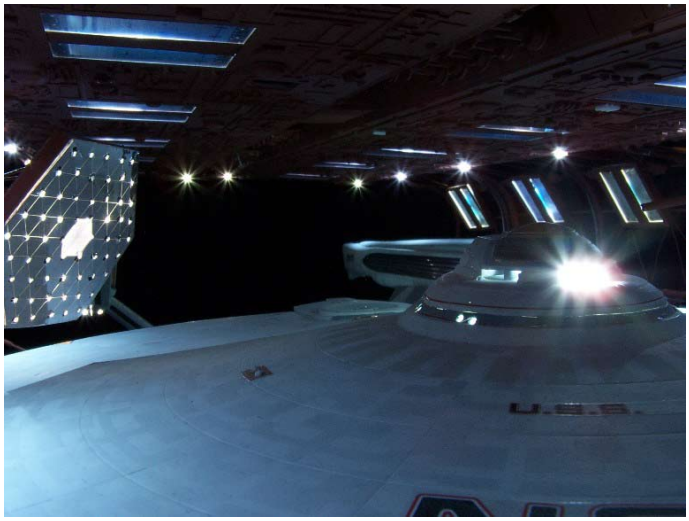


I have always been interested in Scratch building Star trek models since I was a kid. I began with models made from cardboard Milk cartons and cereal boxes and construction paper. Of course I had built all of the standard kit models, The Enterprise, Klingon and Romulan ships, the bridge kit, deep space station K-7, the Galileo but I wanted to build things that you couldn't get as a model kit. I built my own transporter model with lighting effects and even the shimmering effects when I had received my first Star Fleet Technical Manual by Franz Joseph I couldn't wait to start building my own versions of the corridors and hangar deck. My models became larger and larger as time went by. At one point I built a replica of the Enterprise corridors, briefing room, transporter room, and auxiliary control room to compliment a 4' model I had built of the original series bridge. I photographed all of these cardboard models knowing full well I had to eventually destroy them because they were just too large to keep.

When The Motion Picture came out, I had the opportunity to see it on a very large screen. I wasn't too sure if I liked the refit design of the Enterprise back then, but I began to notice the incredible details on the ship. The dry dock the ship was sitting in impressed me very much. Tons of details holding what we as the audience perceived as a gigantic structure of our beloved Enterprise in its place. Most

people felt the Dry Dock sequence was long and boring. I immediately felt that this was an awesome and necessary scene that was a must for the film to finally show the fans exactly how enormous the ship really was. It was beautiful! Not long after the movie came out I bought the AMT/Ertl refit model and after putting it together and lighting it I had always wondered what it would be like to build that thing that surrounded it in the movie... the Dry Dock. It would be about 10 years later before I would actually begin the task of gathering reference materials to begin building it.

The only behind the scenes picture that I had ever seen of the dry dock was in an old StarLog magazine. There were pictures of the ship under construction but only the unassembled pieces of the dock sitting on a table. I never saw any good pictures of the dock at all. Only what was in the movie. That's it. Before the internet, it was almost impossible to find pictures and articles as well as blueprints and designs. If a magazine was sold out.... it was "SOLD OUT" You couldn't find a copy of it anywhere unless you knew a friend or someone who had a copy. Building the dry dock at this point was out of the question at this point.
In the meantime I had palled up with a good friend of mine who was very much into building Sci-fi models. His forte was Star Wars, but he enjoyed Star Trek as well. For a couple of years we built some very interesting projects including the interior of the SPACEDOCK from ST: III: TSFS. We found a few more buddies that enjoyed Star Trek and around the year 1992 we went to a Star Trek convention that would forever change our model building lives. It was the first convention that we ever attended. The guest speakers were Patrick Stuart and John DeLance. We were able to stay for Patrick but it was getting late for us and we needed to start heading back home. As we went out into the corridor from the auditorium, we happened to see a small doorway down the hall with a small line of people standing outside waiting to get in. People were saying things like: "Those are unbelievable", "I've never seen anything like that..." and so forth. Was it worth investigating? Why not. We got in the line and eventually entered a fairly small room that contained an unbelievable sight! There were about 15 to 20 large scale models of many different Star Trek ships from the original series to all of the movies and the next generation. They were all lit up and had functioning lights and engine effects. We were awestruck! We were in modeller heaven. Behind a table sat a very humble and timid looking man by the name of Tom Webber who was more than willing to share with all of us his modelling tips secrets. We had never seen so many huge starship models in our lives. Mr. Wibben had an Enterprise E scaled to the TOS AMT kit that had warp nacelles powered by bug zapper lights, he had a bird of prey model with wings that would adjust using a battery powered screw driver. He had a 5' refit Enterprise sitting next to a studio scale Reliant. He even had a 6' model of the Space Dock with a damaged refit model entering into the docking bay. I think we stayed in that room about 2 hours asking him all sorts of questions. By the time we left the convention, all of us were ready to build our own large-scale models. Before we left, my friend bought one of Mr. Wibbens home videos, which show-cased even more models that he was unable to bring to the convention. One of those models just happened to be the dry dock from the motion picture that was scaled to the AMT/Ertl model. His model was made from brass tubing and plastic. At the time, I wasn't sure how I would be able to bend all of that tubing so perfectly and brass wasn't exactly cheap to buy. So, this was something that would have to be put on the back burner once again for another 13 years or so. But I



knew someday I would build that model. It was just a matter of when.
In the meantime I was planning to build several large scale models myself. I began with a 2' model of the Galileo shuttle craft based on David Winfrey's

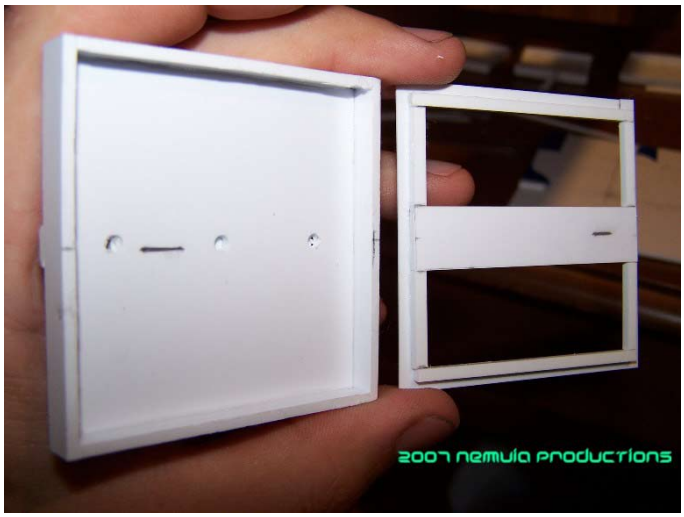
blueprint designs, then I started blueprinting out the plans for an 8' TOS Enterprise. The Enterprise was very tedious. All parts had to be built from scratch. So it was a very wearing project. Now, don't laugh, it was about 2001 when I had first connected myself to the internet. I began building my first website. I also started joining various modelling forums and I began to learn that there were many Trek modellers out there! This fuelled my desire to continue building my TOS Enterprise. But I still wanted to find at least one more refit kit. As I searched many forums I began to find that there were many refit models. And some of these modellers were putting an incredible amount of detailing on their ships. Some were even putting in hangar bays and botany sections with the utmost details. I kept thinking: "How in the world can they cram all of that detail in such a small model?" I began noticing more and more the phrase PL Enterprise and PLE and so forth.

I kept thinking what in the world does PLE mean? Too stubborn to ask the question in the forums I kept searching for the answer on my own. Then one day on one of the forums I was subscribed to pointed out that the Polar Lights Jupiter was now in stock.... Polar Lights.... hmmm PL! That's it. Polar Lights Enterprise! I Just GOT IT! I then looked up Polar lights.... I was amazed to find out this was a 3' model.... not like the puny AMT.... I got to get one of those!!! So I did. When it arrived in the mail I had the thing almost completely put together without cement in an hour.... The wheels were turning! I began researching as many PLE threads as I could to find out how different modellers were displaying the prizes. I then thought that maybe someone had built this monster of a model with their own version of the dry dock. I knew right away I wanted to display this model in the Dry dock! I began to research the

Dry Dock in any way shape or form. It was nearly fruitless. Unbelievably I found only 2 dry docks. One was scaled out to a Stargazer class ship and was a very angular version of the dock and the ship was mounted from the top rear of the saucer section and the other was a CG version. Now what? I remember

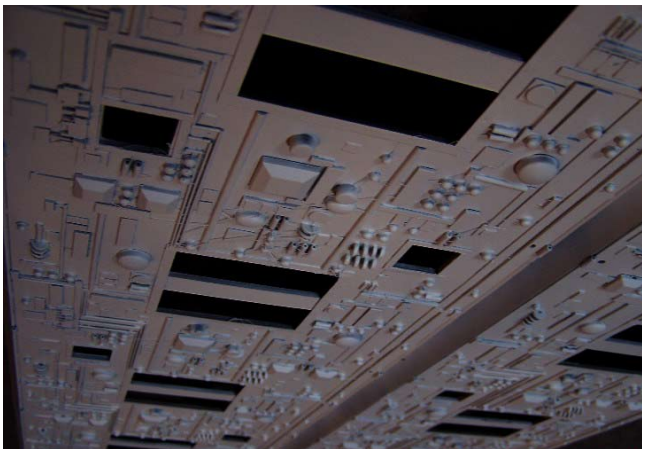
Tom Wibben's video and his Enterprise were held in place by string or wire connected through holes drilled through his saucer section and I believe from the nacelles as well. I knew I didn't want to mount my ship with the support armature visible through the engineering section so the only place left was through the docking port for the gangway. This would create the illusion of the ship actually floating in the dry dock without any support from a mounting pole or wires. This also forced me to wire my Enterprise through the gangway so that none of the wires would be visible anywhere. Now that I had all of the particulars down I could begin designing the dry dock model to fit around my PL Enterprise.

As I said there was very little reference material on the dry-dock and the biggest question I had was "How big was this model going to have to be?" As I was working on my PLE I had stumbled across a fellow modeller who was starting his own Dry dock model. He had a few photos displayed on a forum of one of his side panels with the frame and connectors already finished. In his comments he had mentioned that he measured out what he felt to be the dimensions of what his dry-dock would finally be. As I recall he said it would be about 42" in length and about 24" wide. I measured my PLE and added those dimensions to my measurements. They seemed to be very reasonable in proportion. So I used that suggestion as the bases for the size of my model. I began studying the dry-dock sequence in TMP frame by frame to catch many of the details that were on the panels and frames and work booms and lights and overhead modules and so forth. It was not an easy task because many of the freeze-frames even on a digital format were still grainy and fuzzy even on a 60" screen. In a lot of areas I had to improvise on shapes and even colours for the dock itself. I took my sketches and began scaling out in actual size of the model how big each piece would need to be. 1 inch = 1 inch for the model made it so much easier to refer to my blueprints while building. Rather than starting from the sides of the structure as my fellow modeller had done, I wanted to get the bulk of the model done first which was the overhead modules. This way I could determine what to use to give the model strength so it could support the weight of both the ship and its own weight. At first I was going to use a solid piece of wood for each of modules and then I realized how heavy that would make the model and thought there had to be a better way. Well, I had just finished a small plumbing project for a friend of mine and I realized how strong copper piping can be as well as light-weight and easy to cut and assemble together. Plus I also recalled that when I was working on my 8' enterprise project and my Galileo how strong and sturdy the structures were when they were assembled together. I was using .080 thick styrene plastic as Tom did when he built his scratch builds. I had a lot of extra from my Enterprise project so I began using that for the skin of the model and the copper piping would be



the frame structure. Together these elements would make the model strong and sturdy when finished. I estimated that the models together would weight no more than 15 - 20 pounds by themselves at the most.

The styrene is very strong when reinforced in the proper way. The modules were the easiest thing to build. They were very boxy and angular in shape. It took me about a week to build both of them. I then



had to make sure that the copper frame fit properly on the inside of the modules so I could cut out the needed holes for the piping to fit through. Next the modules had to be detailed to the extreme, yet have a consistent pattern to them. There were 7 sections on each of the modules, and all of them had to have a pattern that suggested that these modules could be interconnected and added or removed when needed depending on the side of ship that needed refitting. In the Motion Picture you only were able to see the underneath of the modules and the fore end of the structure with a small hangar with a travel pod sitting inside. The other module also had what appeared to me to be a hanger for cargo container storage. So I had to decide what was going to be on

the top side of the modules as well as the back end of the dock. I began to reason with myself that what in the world would they need these gigantic modules for. It would be an incredible waste of space if they were only to support the sides of the structure. I reasoned that this dock was constructed for the purpose of refitting an old ship or repairing and/or restoring and re supplying an existing ship. The modules would therefore be used to store new or repaired shuttlecraft, storage of cargo containers, weaponry, food packs, crewmen, and maybe even small training facilities and offices and any other equipment that would be needed to restock a returning ship with. If you recall in the movie there were work bees toting storage modules and other equipment flying all around the Enterprise while Kirk and Scott were flying passed the dock. Those things had to come from somewhere, so to use some of that space I added a second hangar on the reverse side and used all of the extra shuttles and cargo containers and miscellaneous pieces I had left over as a storage bay that you could look into and say... “yeh... that makes sense... good idea~!” If the copper structure wasn’t in the way I would’ve made the cargo bay much deeper and added a lot more ships inside. All of the detailing in the lower outside of the modules was done by taking different geometric shapes and beads and small pieces of pre-cut tube lengths and squares and rectangles cut pieces of plastic of various thicknesses as well as these little eye-ball pieces you can buy for making stuffed animals and systematically add each piece one at a time in a pattern that would be the exact same on all 14 sections of the modules. The sides of the modules were done in a similar fashion by taking hundreds of pre-cut shapes and lightly cementing each one into place. It did take quite a bit of time to do, but I was no hurry to do a rush job. That is why I didn’t do any resin casting to get it done quicker. It’s a hobby and it’s something I like to take my time with.

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